



# ACCURATE

## LOCK & HARDWARE

AMERICAN CRAFTED SINCE 1972

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### M9100E-ELR Motor Drive Electrified Dual Motor Mortise Lock

ELECTRIFIED LATCH RETRACTION COMBINED WITH LOCK/UNLOCK LEVER CONTROL

## MOTOR DRIVE ELECTRIFIED DUAL MOTOR MORTISE LOCK

### M9100E-ELR

This dual electrified mortise lock features two independently powered motors to offer the convenience of ELR touch-free operation with fail safe/fail secure functionality. The door will remain latched when closed to ensure code compliance.



# M9100E-ELR

**M9058E-ELR/M9059E-ELR** for doors 1<sup>3</sup>/<sub>8</sub>" minimum (1" armor front)

**M9158E-ELR/M9159E-ELR** for doors 1<sup>3</sup>/<sub>4</sub>" minimum (1<sup>1</sup>/<sub>4</sub>" armor front)

UL Listed 3 Hour (Mechanics R13846/R27504 and Electronics R10121).

Grade 1 Certified to ANSI/BHMA A156.13.2005 Standard

**BACKSETS:** 2<sup>1</sup>/<sub>2</sub>" , 2<sup>3</sup>/<sub>4</sub>" , 3<sup>3</sup>/<sub>4</sub>" , 5" or 6"

**APPLICATION:** Access granted with both a keypad and wall paddle that opens the door automatically on exterior with wall paddle on inside for egress. Suitable for controlled egress openings and stairwell reentry doors.

## KEY BENEFITS:

- Continuous duty motor enables door to be scheduled for unlocked status for indefinite periods of time.
- Contributes to elevated accessibility by automatically retracting the latch rather than requiring it to be done by hand, particularly when paired with a low energy automatic door opener. Similar to [M9143ELR](#).)
- *Access control components (keypad, wall paddle, etc.) by others*

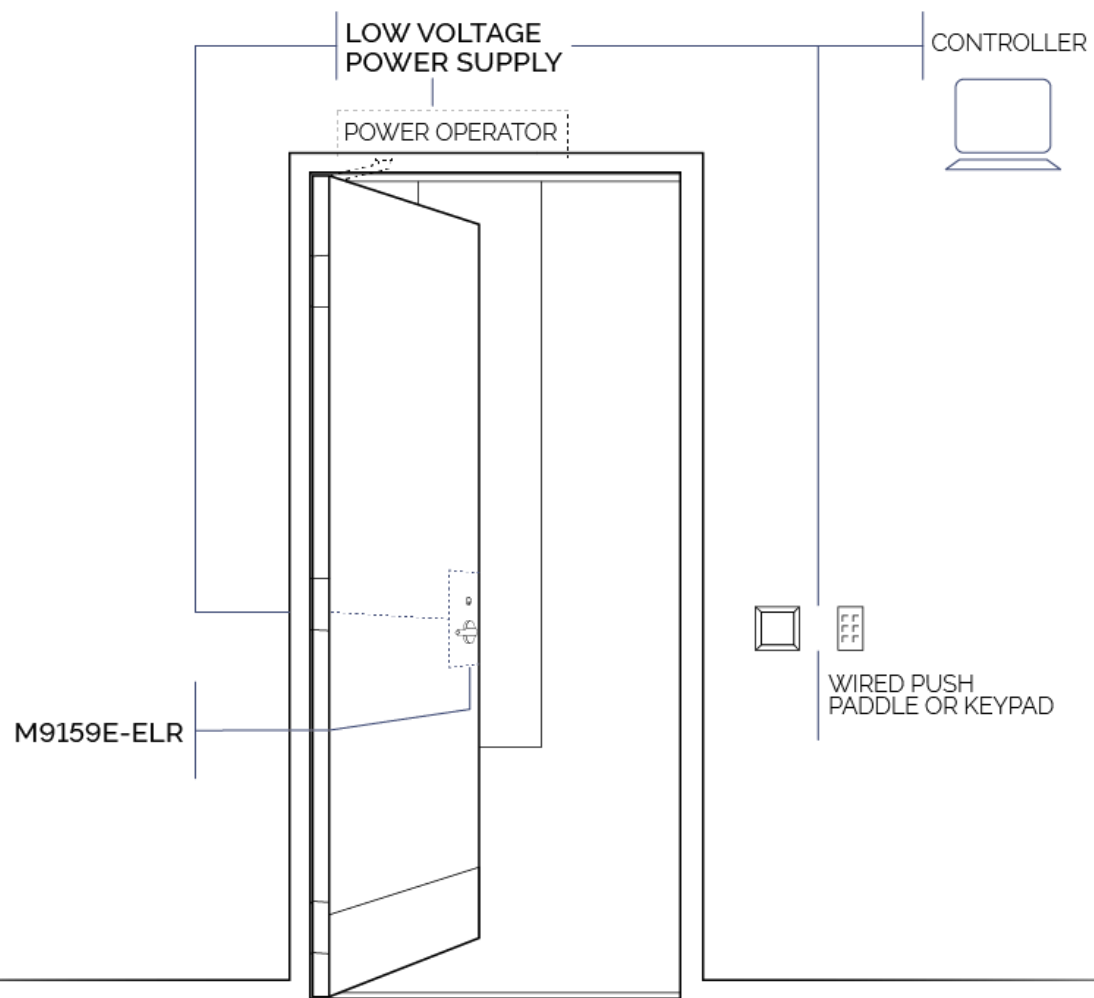
**METAL DOOR**



**WOOD DOOR**



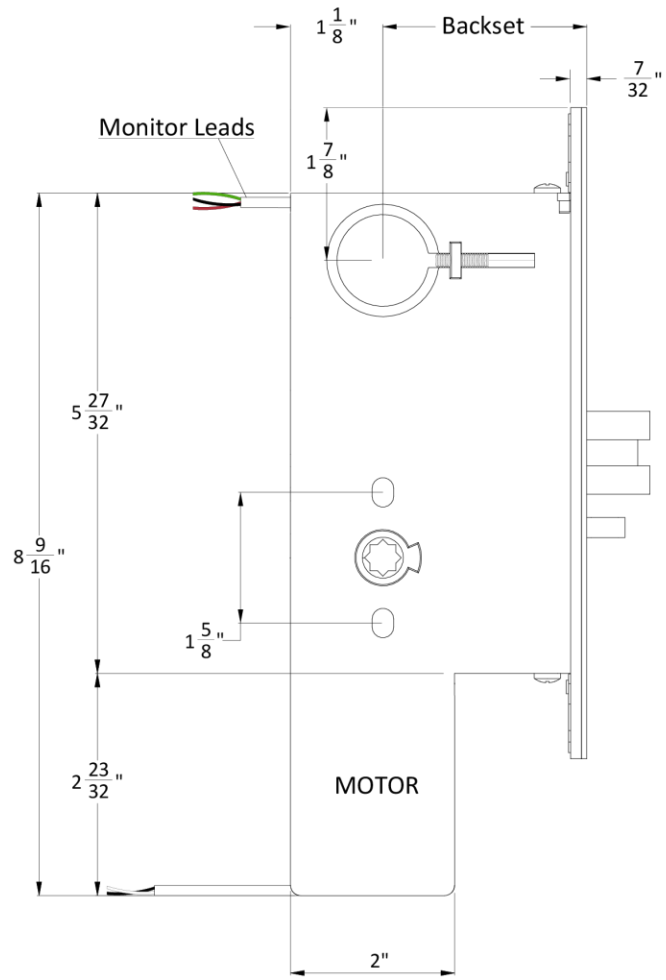
# M9100E-ELR Operation



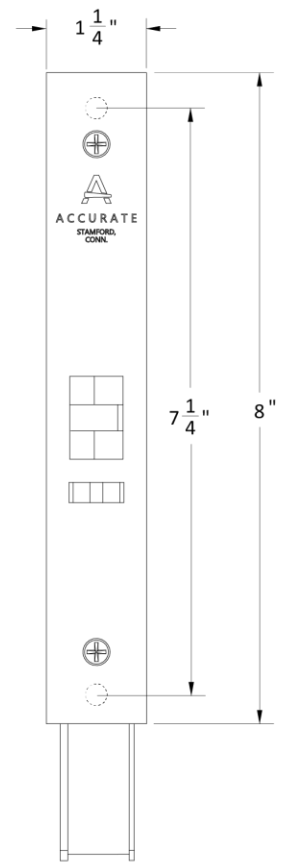
*Access control components by others.*



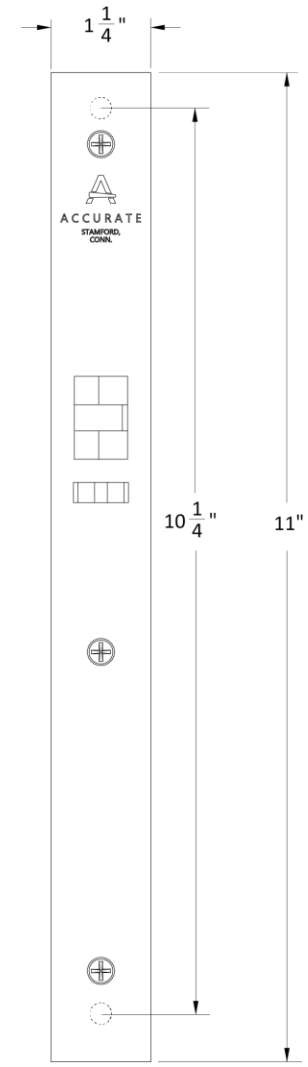
# M9100E-ELR Dimensions



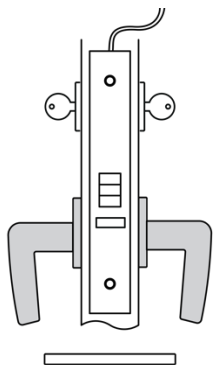
## METAL DOOR



## WOOD DOOR



# M9100ELR Technical Details



## M9158E-ELR ELR + ELEC Dual Door Control

Latch bolt by key either side.

Auxiliary latch deadlocks latch bolt.

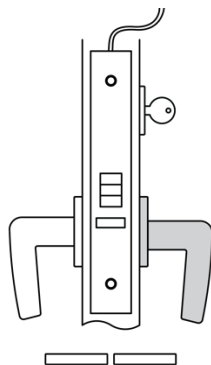
Motor Drive Electric Latch Retraction

Latch retracts when power is applied (FAIL SECURE only).

Motor Drive Electric Controlled Locking/Unlocking

**FAIL SECURE OPERATION:** Inside and outside trim unlocked when power is applied and locked when power is removed

**FAIL SAFE OPERATION:** Inside and outside trim locked when power is applied and unlocked when power is removed. Lockset will unlock in the event of power failure.



## M9159E-ELR ELR + ELEC Dual Door Control

Inside trim always free.

Latch bolt by key outside.

Auxiliary latch deadlocks latch bolt.

Motor Drive Electric Latch Retraction.

Latch retracts when power is applied (FAIL SECURE only).

Motor Drive Electric Controlled Locking/Unlocking

**FAIL SECURE OPERATION:** Outside trim unlocked when power is applied and locked when power is removed

**FAIL SAFE OPERATION:** Outside trim locked when power is applied and unlocked when power is removed. Lockset will unlock in the event of power failure.

**OPERATION:** Key Cylinder (by others) will override electronics to retract latch bolt

### ***Motor Electric Controlled Locking/Unlocking (Blue Leads)***

Voltage: 12-24V AC/DC (11V-30V)

Current: 250mA MAX Inrush, 10mA MAX Holding

Non-polarized leads

### ***Motor Drive Electric Latch Retraction (White Leads)***

Filtered and Regulated Power Supply

Voltage: 24VDC (21VDC-30VDC)

Current: 625mA MAX Inrush, 150mA MAX Holding

Non-polarized leads

# M9100E-ELR Monitoring Functions

## AE - AUTHORIZED EGRESS

Also referred to as REQUEST TO EXIT (or REX switch), monitors the use of the INSIDE trim when the OUTSIDE trim is locked.

### ELECTRICAL SPECIFICATIONS:

SPDT Mechanical switch

Voltage	Current
125 VAC	1 AMP
30 VDC	0.5 AMP

## LM – LATCH BOLT MONITORING

Monitors the full extension of the main latch.

### ELECTRICAL SPECIFICATIONS:

SPDT Mechanical switch

Voltage	Current
125 VAC	1 AMP
30 VDC	0.5 AMP

## AM – DEAD LATCH MONITORING

Monitors the position of the dead latch. To activate switch, the lockset must be in the closed position with the auxiliary latch depressed and main latch extended.

### ELECTRICAL SPECIFICATIONS:

SPDT Mechanical switch

Voltage	Current
125 VAC	1 AMP
30 VDC	0.5 AMP

## LB – LOCKING BAR MONITORING

Monitors the position of the locking bar.

### ELECTRICAL SPECIFICATIONS:

SPDT Mechanical switch

Voltage	Current
125 VAC	1 AMP
30 VDC	0.5 AMP

11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1

8

# M9100E-ELR Monitoring Functions

## SM – SECURITY MONITORING

A combination of AM and LB, SM monitors IN SERIES\* the status of the locking bar (locked or unlocked position) and the status of the auxiliary latch (dead latch position).

Lockset must be locked with the main latch extended and the auxiliary latch depressed to get a secure signal. If any of the conditions are not met, lockset goes into an unsecure mode.

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### ELECTRICAL SPECIFICATIONS:

2 each SPDT Mechanical switches wired in series

Voltage	Current
125 VAC	1 AMP
30 VDC	0.5 AMP

*\* If independent monitoring is required (not in series), please specify as SM2 (this is a combination of AM and LB)*

## DPS – DOOR POSITION SENSOR

Monitors the door position. A magnetic sensor mounted in the mortise lock reacts to the proximity of a magnet mounted behind the ASA strike.

### ELECTRICAL SPECIFICATIONS:

SPDT Magnetic Reed switch

Voltage	Current
28 VDC	0.3 A

## LMR – LATCH BOLT MONITOR RETRACTED

A dry contact closure will occur 0.5 seconds after the full retraction of the main latch bolt under power and will remain until power is removed or if the main latch bolt unintentionally extends.

### ELECTRICAL SPECIFICATIONS:

Dry contact Non-polarized leads

11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1



Applies to: M9158E-ELR/M9159E-ELR   All Backsets Standard and Upside Down (USD) Configurations 2-1/2", 2-3/4", 3-3/4", 5", 6" Backsets							
AE Authorized Egress	AM Auxiliary Latch Monitor	LB Locking Bar Monitor	SM Security Monitor	SM2 Security Monitor	LM Latch Bolt Monitor	DPS Door Position Sensor	LMR Latch Bolt Monitor Retracted
<i>Inside Hub When Outside Locked</i>	<i>Dead Latch</i>		<i>AM + LB in Series (3 Wires)</i>	<i>AM + LB (6 wires)</i>			
X	X	X			X	X	X
X			X		X	X	X
X				X	X	X	X
X					X	X	X

# M9100E-ELR Trim Examples

**21L LEVER**



**1R ROSE**



## ACCURATE TRIM

Specify Accurate levers, roses, escutcheons, pulls, etc. [Click or scan to see trim options.](#)

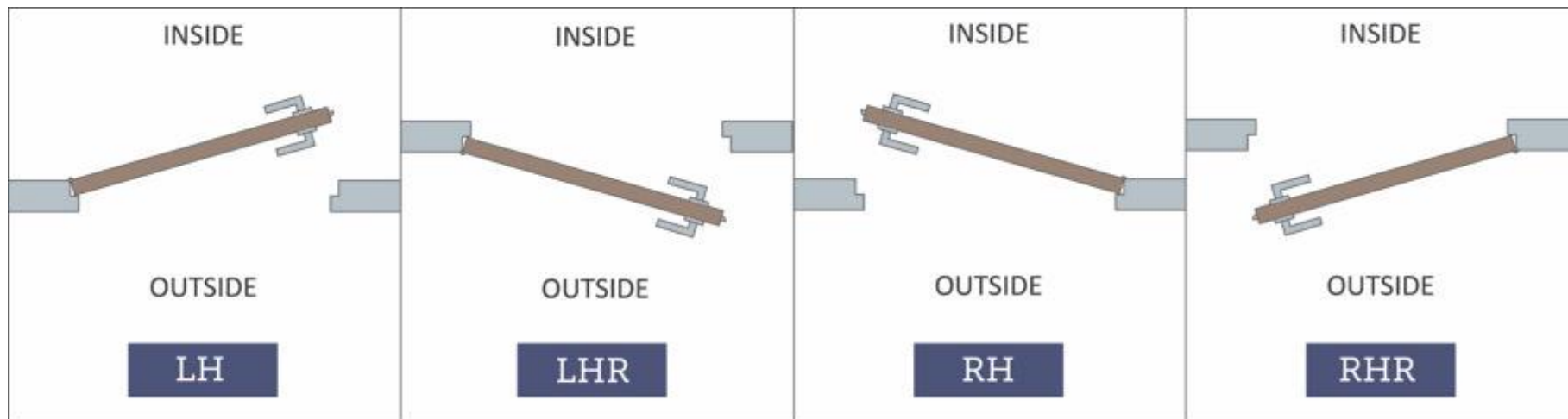


SCAN HERE



# HOW TO SPECIFY

## HANDING



## FINISHES

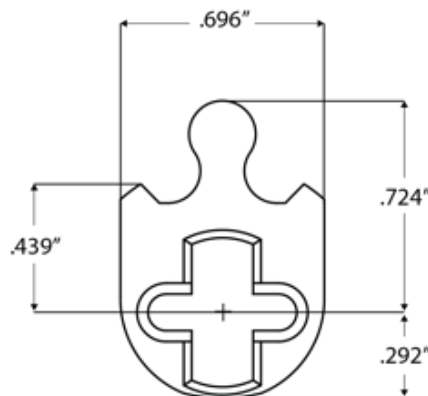
**GROUP 1:** US4, US4NL, US32D\*, US26D

**GROUP 2:** US3, US3NL, US26, US32\*, US9\*, US10\*, US10B, US14, US15, US19

**GROUP 3:** BN, BB, TN, TB, DURO, ESN, US15A, US5

\* Trim options (including Accurate Levers) may not be available in US32D, US32, US9, or US10 finish. Please call for assistance.

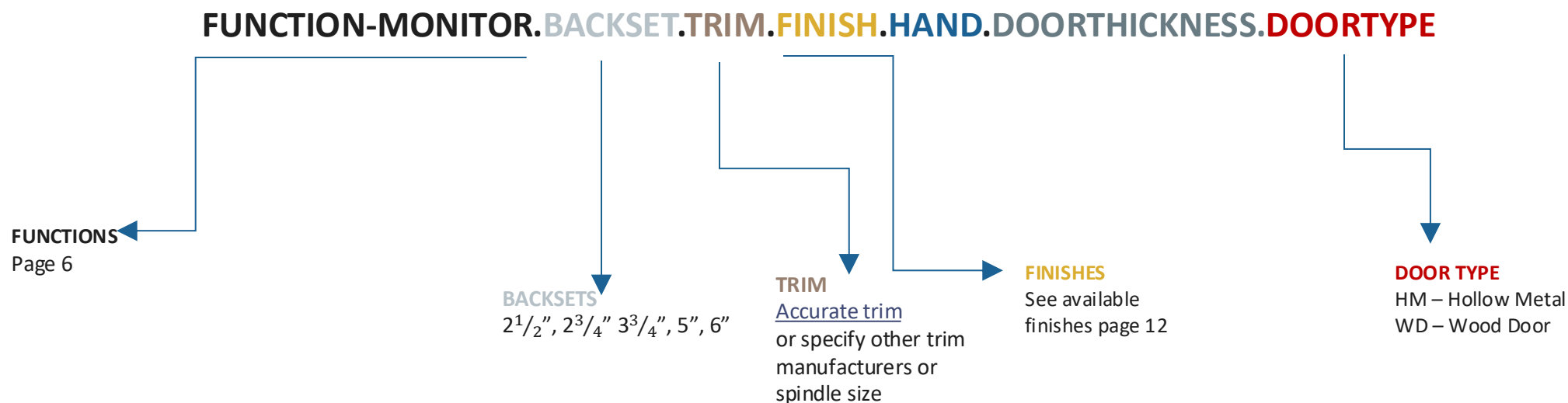
To view example of finishes visit: [Accurate Finishes](#).



## CYLINDERS & KEYING

M9100E-ELR Series locks accept any standard American mortise cylinder. For details on required cams and compatibility with other manufacturers' cylinders, please visit: [Accurate Support](#).

# HOW TO SPECIFY



## EXAMPLES

**Dual Motor Mortise Lock | Authorized Egress | Accurate Trim**

E.g.: M9159E-ELR-AE.212.29L/2R.US26D.RH.134.HM

**Dual Motor Mortise Lock | Accurate Trim**

E.g.: M9158E-ELR.234.19L/1R.US4.LH.134.WD

**Dual Motor Mortise Lock | Latch Bolt Monitor Retracted | Accurate Trim**

E.g.: M9158E-ELR-LMR.234.21L/1E.US26D.RH.134.HM

**Note: Access Control Components by Others.**

**M9100E-ELR lock is ideal to pair with a low energy power operator (by others).**

## SPECIAL OPTIONS AVAILABLE

- SS-Security Strikes
- USD K x K Upside Down (cylinder/thumb turn below knobs)
- USD L x L Upside Down (cylinder/thumb turn below levers)
- K x L Knob Outside, Lever Inside
- L x K Lever Outside, Knob Inside
- Compatible with the following add-ons: SilentPac™ Lever Dampening Disc

*\*Note: For compatibility with other manufacturers' trim please call for assistance.*

**ACCURATE LOCK & HARDWARE  
MANUFACTURERS OF LOCKS AND  
CUSTOM ARCHITECTURAL HARDWARE**

1 Annie Place | Stamford, CT 06902

**P:** 203.348.8865

**F:** 203.348.5234

**E:** [sales@accuratelockandhardware.com](mailto:sales@accuratelockandhardware.com)

**[www.accuratelockandhardware.com](http://www.accuratelockandhardware.com)**

